



Spring field training for wetland monitoring volunteers at Falk Park (2016)

Milwaukee County Parks Research & Citizen-based Monitoring 2015-2016, Two Years in Review

Prepared by Milwaukee County Department of
Parks, Recreation and Culture

About Us

The Natural Areas Program is a creative use of partnerships that engages Wisconsin's largest community through the science and beauty of restoration ecology. In just 8 years the Natural Areas Program has developed over 75 community partnerships and has trained 9,000 volunteers. These volunteers, who have donated nearly 76,000 hours, consist of university students, elementary school students, community groups, government agencies, NGO's, religious institutions, and private corporations. The assistance these partnerships provided and continue to provide is integral to the management of the Milwaukee County Park's 9,200 acres of natural areas. These resources include upland and bottomland forest, fens, oak savanna, remnant wet-mesic prairie, shrub-carrs, open marsh, lagoons, pollinator gardens, and surrogate grasslands. These are natural resources that have been historically molded by the influences of a great lake, Wisconsin's ecological tension zone, and over 150 years of Euro-American settlement. Many unique challenges present themselves in a county where the human element cannot be separated from the natural element, nor should it. The overriding goal is restoration and management of these natural resources, but another which is of equal importance is binding the citizens of Milwaukee County to their natural areas. In the process we are creating stewards, advocates, donors, and in effect a corps of restoration ecologists and citizen scientists.

Photo Credit: Julian Kegel



Predacious diving beetle larva

Natural Areas Mission Statement

Blending Milwaukee County's diverse and unique natural areas with its culturally rich communities to preserve and nurture natural heritage for current and future generations.

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Wildlife Monitoring Program

Monitoring wildlife populations is a reliable way to measure the ecological health of our natural areas, as well as determine the success of our restoration efforts. The Parks Department's Wildlife Monitoring Program assists our natural areas managers in allocating habitat management resources and planning future restoration projects. The variety of monitoring efforts that the Natural Areas Program conducts gives the Parks Department a better understanding of the occurrence, distribution, and overall status of wildlife populations within Milwaukee County. Data collected by Natural Areas staff, partners and Citizen Scientists is crucial in helping to make sure that common species remain common, and that rare, threatened, and endangered species are protected and properly managed for within the Park System.

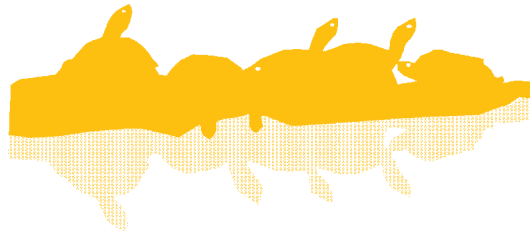


Photo Credit: Julian Kegel

Julia Robson at an Ephemeral pond habitat in Whitnall Park

Research Projects

The Parks Department's Natural Areas Program trains volunteers to participate in a variety of research projects being conducted within the Park System. As the Parks Department's Citizen-based Wildlife Monitoring Program continues to develop and expand, more opportunities will arise and the need for well-trained, dedicated Citizen Scientist volunteers will continue to grow. Some of the research projects that volunteers participate in include:



- Citizen-based Wetland Monitoring
- Secretive Marsh Bird Surveys
- Songbird Nest Box Monitoring
- American Kestrel Nest Box Monitoring
- Wood Duck Nest Box Monitoring
- Turtle Monitoring
- Snake Monitoring
- Bird Monitoring
- Wildlife Camera Monitoring
- Milwaukee County Urban Wildlife Inventory
- Milwaukee County Coyote Watch
- Service Learning Projects

Citizen-based Wetland Monitoring

Project Overview Did you know that 75% of Wisconsin's wildlife depend on wetlands, and that 50% of Wisconsin's wetlands have been lost since the 1800s? For these reasons alone, the Parks Department places a high value on wetlands within the Park System's natural areas. These wetlands serve as crucial habitat for various species of amphibians, reptiles, birds, and invertebrates. Wetlands and the organisms that inhabit them, particularly amphibians, are highly sensitive to environmental change and/or degradation. The threat of degradation is high in urban natural areas if sites are not properly managed, therefore, knowing the location of different wetland systems (ephemeral, permanent, marsh, etc.) and the potential they may have for sustaining sensitive and rare amphibian and invertebrate (crayfish) populations is critical.



Chad and Julia Robson checking on minnow traps set for wetland species



Anna starting the wetland season right!

Egg mass of American toad



Methods The Parks Department's Natural Areas staff and volunteers use protocols developed by Dr. Gary S. Casper (UWM Field Station) to monitor for amphibian and invertebrate species presence in wetlands. Surveys involve setting aquatic funnel traps (minnow traps) within wetlands that are checked daily during a 2-3 week period in spring. In addition to trapping, staff and volunteers also conduct visual searches for egg masses laid by breeding amphibians to determine species presence within wetlands. Wetland monitoring volunteers recorded data on field data sheets, collected photo vouchers of species observed during surveys, and entered their data into an excel database.





Results In 2015 and 2016 the Parks Department's Natural Areas staff hosted 7 workshops for wetland monitoring volunteers. The workshops were attended by a total of 168 potential participants, ultimately resulting in 63 wetland monitors that donated over 1,600 hours to survey a total of 30 wetlands in 2015 and 2016. Wetlands were monitored throughout the Root River and Oak Creek Parkway in 2015 and 2016. Data collected by staff and wetland monitoring volunteers verified the presence of several species of local conservation interest (SLCI) including blue-spotted salamanders, tiger salamanders, spotted salamanders, Eastern grey tree frogs, wood frogs, boreal chorus frogs, northern green frogs; species of special concern (SC) including digger crayfish and prairie crayfish; common species including virile crayfish, calico crayfish, American bullfrogs, northern leopard frogs, American toads, and white river crayfish; and non-native rusty crayfish. In addition to the data collected by volunteers, the Parks Department's Natural Areas staff also monitored throughout the Little Menomonee River Parkway, Menomonee River Parkway, and Oak Creek Parkway.

YEAR	TOTAL # of VOLUNTEERS	TOTAL # of WETLANDS MONITORED	TOTAL # of HOURS
2015	42	30	812
2016	52	29	832

Wetland Species Detected			
Conservation Status	Salamanders	Frogs	Crayfish
Species of Local Conservation Interest (SLCI)	Blue-spotted salamander	Boreal Chorus Frog	
	Tiger Salamander	Wood Frog	
	Spotted Salamander	Eastern Grey Tree Frog	
		Northern Green Frog	
Species of Special Concern (SC)			Digger Crayfish*
			Prairie Crayfish*
Common Species		American Toad	Virile Crayfish
		Northern Leopard Frog	White-river Crayfish
		American Bullfrog	Calico Crayfish
Non-native, invasive species			Rusty Crayfish

*Both SLCI & SC status

Conclusion Data collected through the wetland monitoring program is actively incorporated into the Parks Department's Wildlife Monitoring Program database in order to guide current and future habitat management decisions. The data collected by wetland monitoring volunteers can be used to compare the current presence and distribution of amphibian and invertebrate populations in Milwaukee County to historical records in order to determine how the populations of particular species or families has changed over time in Milwaukee County. This data will also be essential in the development of long-term management activities and restoration projects, including the potential construction of ephemeral wetlands and reintroduction of native species. The Citizen-based Wetland Monitoring Program will continue into its third year in spring 2017.



Wetland Monitoring Locations

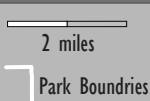


Photo Credit: Julian Kegel



A volunteer checking species of crayfish

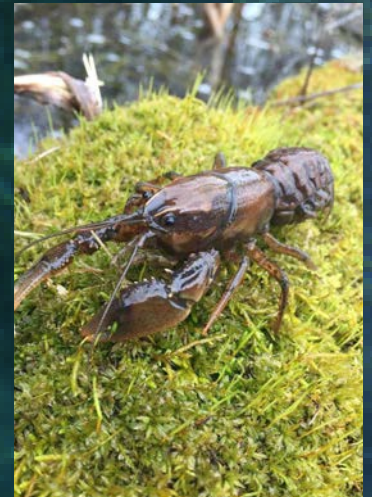


Photo Credit: Julian Kegel



Using an identification guide

Blooming skunk cabbage



Prairie crayfish



Anna, Noah, and Ethan working as a team to collect data

Secretive Marsh Bird Surveys

Project Overview Marsh birds are a group of water birds that includes rails, bitterns, grebes, gallinules, and snipes that typically inhabit very dense, emergent wetlands. These species have rightfully earned their reputation as being “secretive marsh birds” because they don’t frequently vocalize and are therefore seldom seen or heard. As with other forms of wetland wildlife, secretive marsh birds face many threats in urban areas due to habitat loss and degradation, invasive species, predation, and wetland pollution. In Milwaukee County, there are several potential marsh bird species that could breed in some of the Park System’s larger wetland systems including sora rails, Virginia rails, least bitterns, American bitterns, and Wilson’s snipes.

Marsh birds	Potential Breeding Species	Species Found
rails	Sora Rail	Sora Rail
bitterns	Virginia Rail	Virginia Rail
grebes	Least Bittern	Least Bittern
gallinules	American Bittern	Wilson’s Snipe
snipes	Wilson’s Snipe	

Least Bittern



Julia Robson, using a call box, in a marsh habitat

Methods The Parks Department’s Natural Areas staff and volunteers use protocols developed by the Wisconsin Bird Conservation Initiative (WBCI) and Wisconsin Department of Natural Resources (WDNR). Surveys involve the use of broadcast calls from a callbox unit (FoxPro Wildfire II Game Caller) followed by passive listening periods. A total of 3 surveys are conducted in the morning or evening during the breeding season for the primary target species in southern Wisconsin (May 1st–June 15th). Volunteers are assigned survey points at their monitoring site from which they conduct an initial 5-minute passive listening period followed by a 1-minute series of broadcast calls for target species. Each of the 1-minute broadcast segments consists of 30 seconds of playing the vocalizations of a species followed by 30 seconds of silence to listen for any callbacks or responses.



Results In 2016 a total of 3 secretive marsh bird survey volunteers monitored 4 sites with a total of 7 different survey points, donating a total of 21 hours. Survey locations included Mud Lake at Grobschmidt Park and several sections of marsh along the Oak Creek Parkway. Volunteers conducted surveys starting in late May and continued until the middle of June. Of the 4 target species for Milwaukee County, volunteers observed and/or received responses from 3 of the target species on their surveys. Species documented included sora rail, Virginia rail, least bittern, and Wilson's snipe. In addition to the data collected by volunteers, the Parks Department's Natural Areas staff also monitored Rainbow Airport Prairie and Joesph Lichter Park for secretive marsh birds and documented sora and Virginia rails at both sites.

YEAR	TOTAL # of VOLUNTEERS	TOTAL # of SURVEY POINTS	TOTAL # of HOURS
2016	3	11	21



Conclusion Data collected through the secretive marsh bird surveys is actively incorporated into the Parks Department's Wildlife Monitoring Program database in order to guide current and future habitat management decisions. Additionally, data collected by secretive marsh bird survey volunteers is also submitted to the Wisconsin Breeding Bird Atlas II. The secretive marsh bird surveys will continue in 2017, and the Parks Department's Natural Areas Program hopes to recruit more volunteers to assist in this exciting and important survey effort!



Turtle Monitoring

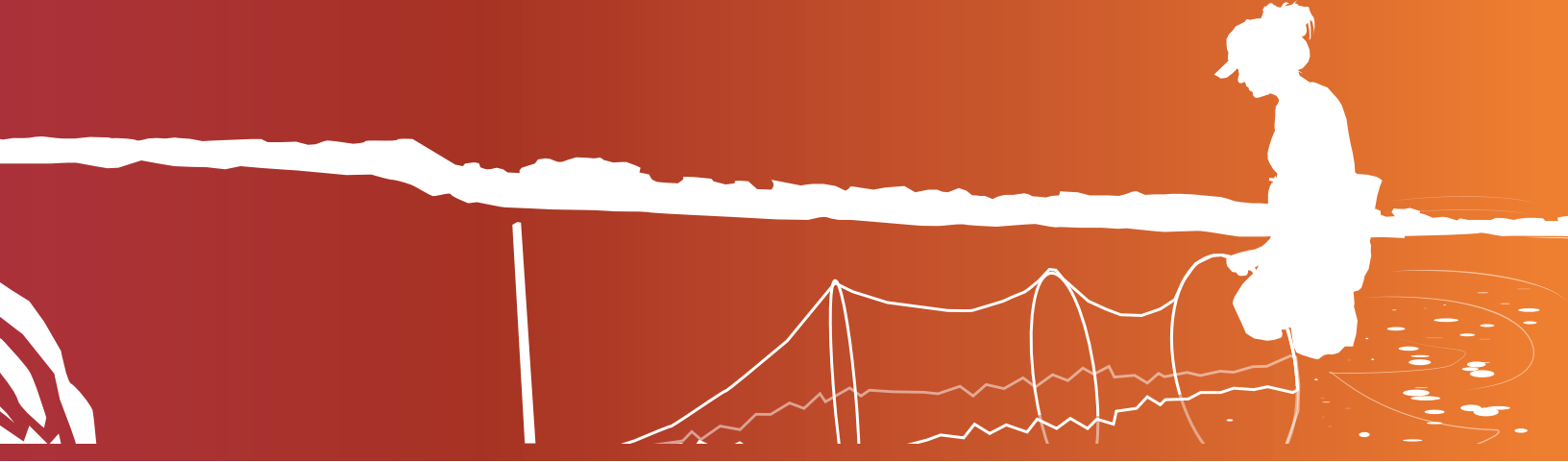
Project Overview Freshwater turtles are an important part of our aquatic ecosystems and overall biodiversity. They play an important role in nutrient cycling, consume and disperse native vegetation, and serve as a food source for other wildlife. Turtles in urban areas face several threats that their more rural counterparts can often avoid such as vehicles and roads, the impacts of invasive species, and human subsidized predators. Often, as many as 80% of turtle nests can be lost due to nest predators such as skunk, raccoon, fox, and opossum. Currently, very little is known about the status of turtle populations within Milwaukee County. The main objective of the turtle monitoring research is to determine the distribution of turtle species in Milwaukee County, the location of sensitive nesting areas, and the status of turtle populations in high priority natural areas through the use of mark-recapture studies.

YEAR	TOTAL # of VOLUNTEERS	TOTAL # of SITES	TOTAL # of HOURS
2015	1	9	10
2016	48	2	49

Methods The Parks Department's Natural Areas staff and volunteers use protocols developed by Dr. Gary S. Casper for conducting both visual turtle basking surveys and trapping surveys. Visual surveys are conducted at each site approximately 10 times between May – July on mornings that are warm and relatively sunny. Data collected includes the species observed, number observed, as well as any photo vouchers for verification. Turtle trapping is conducted throughout May-July using baited hoop net traps set in appropriate microhabitat within wetlands (funneled along cattail beds or basking logs, areas with emergent aquatic vegetation, etc.). Traps are set for 3-4 weeks total and checked daily. Data collected includes species, carapace length and width, sex, notes on appearance/health/behavior. Prior to being released each turtle is marked using a file to create a notch on its scutes which correlates to a specific number (identifier) for that individual turtle. Recapturing marked turtles from within a population overtime will allow for an estimation of population size/density and demographics such as age-class and sex ratios.



Katie greets a painted turtle



Results In 2015 and 2016 a total of 49 turtle monitoring volunteers contributed 59 hours towards basking surveys and nest searches, assisting Natural Areas staff with mark-recapture surveys, and conducting preliminary analysis of the mark-recapture data for several sites. Basking survey locations included Grant Park, the Mill Pond along Oak Creek Parkway, McGovern Park, and the Little Menomonee River Parkway. Nest monitoring occurred at one location along the Milwaukee River Parkway. A mark-recapture study was initiated at Mud Lake at Grobschmidt Park, McGovern Park, and Brown Deer Park. Species observed by staff and volunteers include common snapping turtles, painted turtles, eastern spiny softshell turtles (SLCI), northern map turtles, red-eared sliders, Blanding's turtles (SC/SLCI), and yellow-bellied sliders (non-native). At Mud Lake a total of 56 painted turtles and 33 common snapping turtles were marked with unique shell notches over the course of 12 days (3 trapping sessions).

Conclusion Data collected through the turtle

Katie sets up turtle net traps



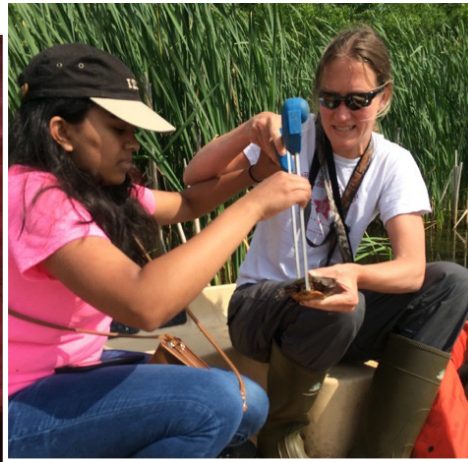
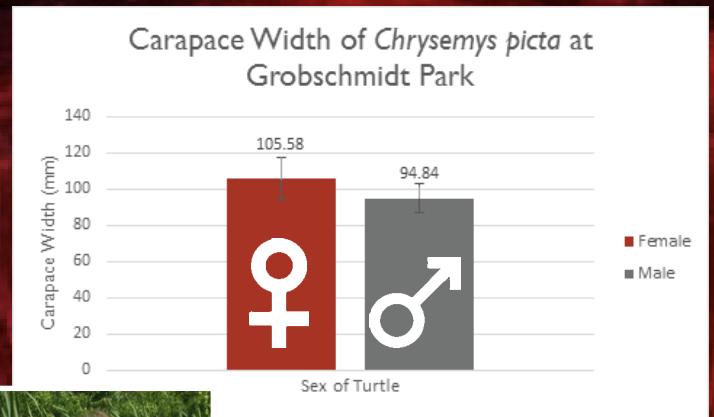
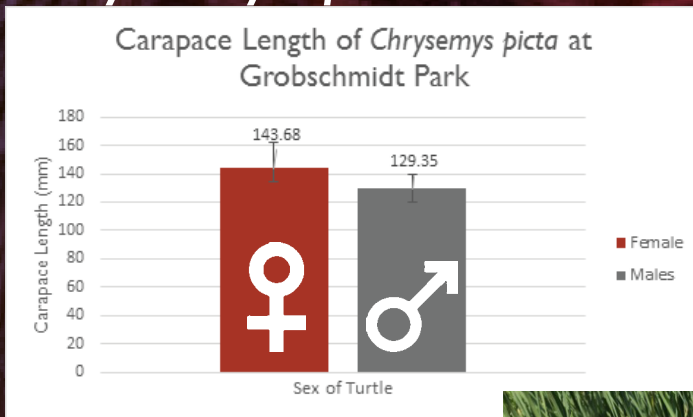
monitoring research is actively incorporated into the Parks Department's Wildlife Monitoring Program database in order to guide current and future habitat management decisions. The preliminary mark-recapture dataset has been analyzed by Dr. Angela Dassow's ecology lab at Carthage College. The results of the preliminary analysis will provide insight into the status and overall health of the turtle population at Grobschmidt Park. The mark-recapture study at Mud Lake in Grobschmidt Park will continue in 2017, and the Parks Department's Natural Areas Program hopes to expand both visual monitoring and trapping to additional sites.



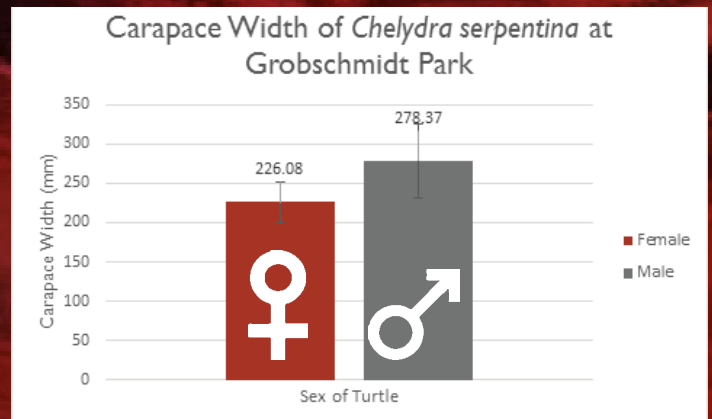
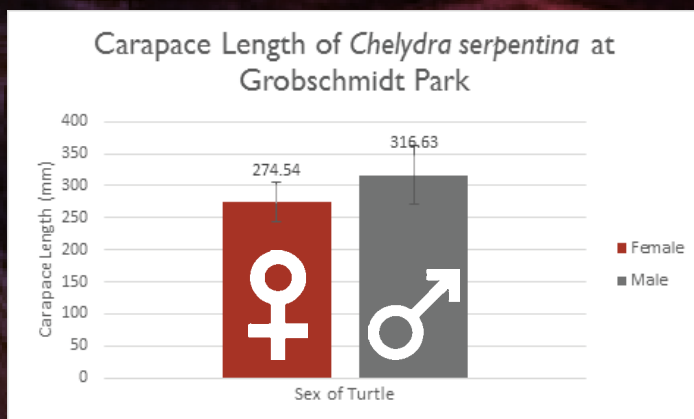
Young painted turtle

Turtle Monitoring Data

Chrysemys picta Painted Turtle



Dr. Angela Dassow
of Carthage College
Ecology Lab collecting
carapace length data



Chelydra serpentina Common Snapping Turtle



Turtle Monitoring Locations



MILWAUKEE COUNTY
PARKS

2 miles

Park Boundaries

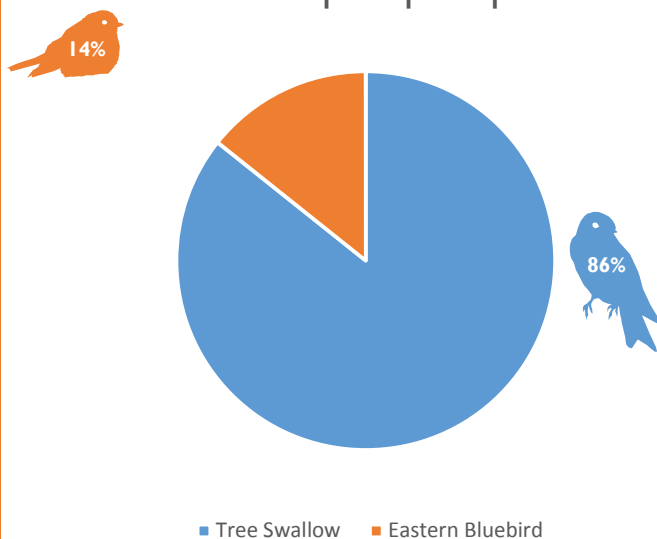
Nest-Box Monitoring

Project Overview Artificial nest boxes provide supplemental habitat for cavity nesting bird species that may otherwise be lacking within urban areas such as Milwaukee County. Monitoring the use of these nest boxes by waterfowl, songbirds, and small raptors is crucial in determining the success and effectiveness of these nest boxes throughout the Park System.

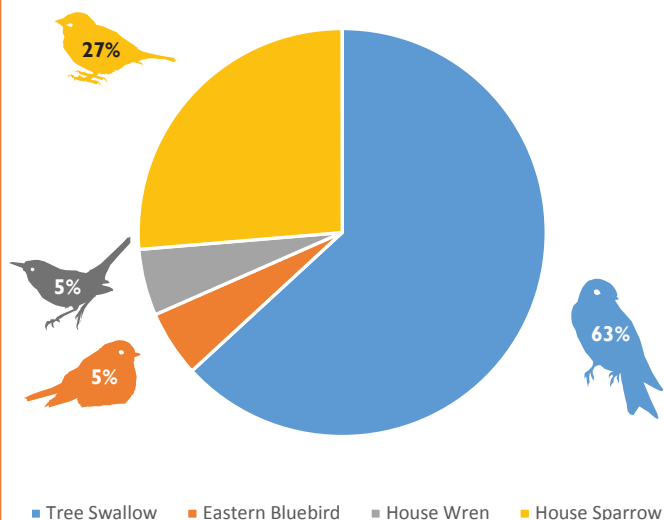


Tree swallow eggs about to hatch

Bender Park Boxes Occupied per Species



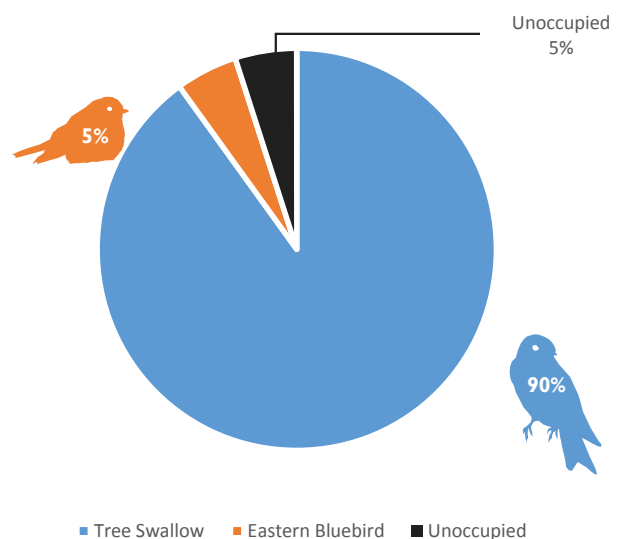
Lincoln Park Boxes Occupied per Species



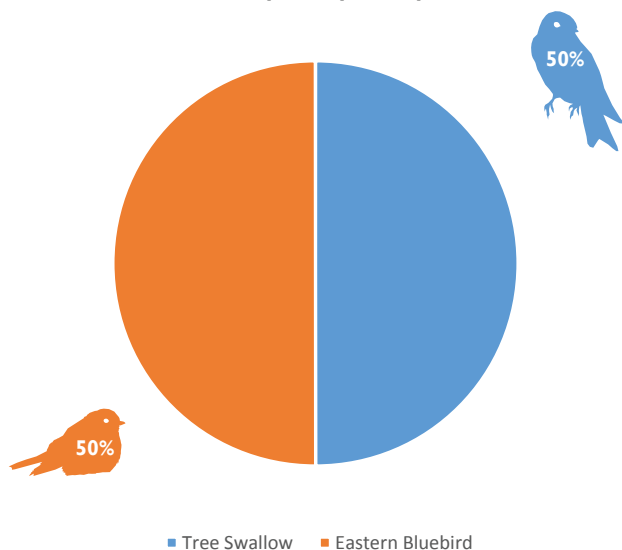
Methods The Parks Department's Natural Areas staff and volunteers use protocols adapted from the Bluebird Restoration Association of Wisconsin, Inc. and the American Kestrel Partnership. Surveys of nest boxes begin in spring and continue until late summer. Nest boxes are monitored a minimum of once per week. During surveys volunteers record the species using the nest box, the number of eggs, number of nestlings, and overall condition of the nest box. Post fledging, volunteers will continue to monitor the nest boxes for additional broods.

Results In 2016 a total of 5 nest box monitoring volunteers monitored 22 songbird nest boxes and 2 American kestrel boxes donating a total of 22 hours. Nest box survey locations included Bender Park, Lincoln Park, and a section of the Root River Parkway on the Hunger Task Force farm. All of the 22 songbird nest boxes were occupied by nesting bird species including tree swallows, house sparrows (non-native), house wrens, and eastern bluebirds. Neither of the American kestrel boxes were confirmed as being occupied by kestrels in 2016, fingers crossed for next year! In addition to nest boxes monitored by volunteers, the Parks Department's Natural Areas staff monitored an additional 24 nest boxes at Falk Park and Rainbow Airport Prairie.

Rainbow Airport Prairie Boxes Occupied per Species



Falk Park Boxes Occupied per Species



Conclusion Data collected through the songbird nest box and American kestrel nest box monitoring program is actively incorporated into the Parks Department's Wildlife Monitoring Program database in order to guide current and future habitat management decisions. Additionally, data collected by staff and volunteers is also submitted to the Wisconsin Breeding Bird Atlas II and the American Kestrel Partnership through the Western Great Lakes Bird and Bat Observatory. The nest box monitoring program will continue in 2017, and the Parks Department's Natural Areas Program hopes to recruit more volunteers to assist in this exciting and important survey effort!



Project Overview Camera trapping is a non-invasive, time efficient way to survey for wildlife species that are more difficult to observe utilizing other field survey techniques such as point counts and/or visual encounter surveys. In particular, this method has proven to be very effective for documenting elusive and/or nocturnal mammal species such as coyote, red and gray fox, southern flying squirrel, and white-tailed deer.

Dave O'Brien, securing a wildlife camera

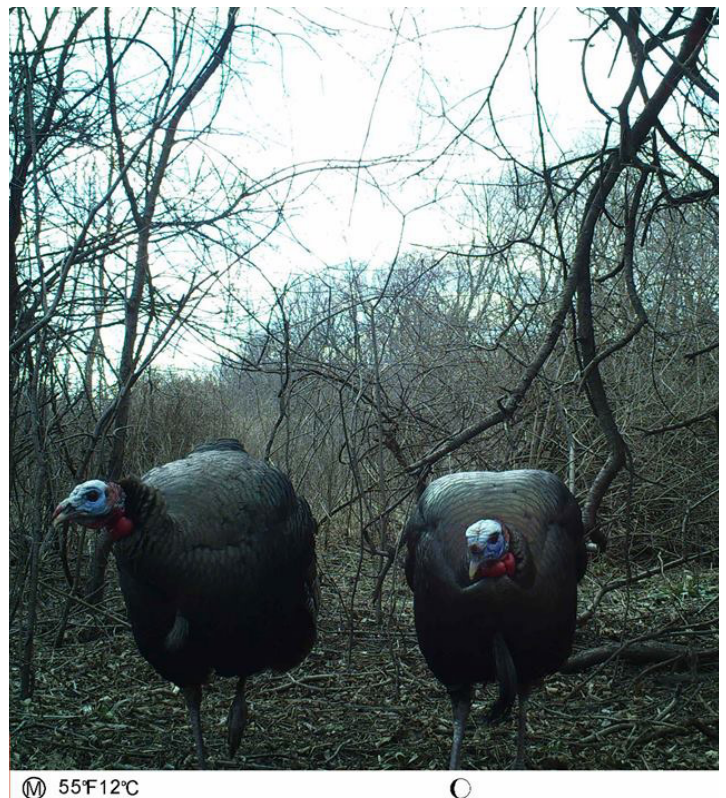


Methods The Parks Department's Natural Areas staff and volunteers use protocols for camera trapping developed by the Parks Department's Natural Areas staff. Camera monitoring can be conducted year-round in natural areas. Cameras are set in areas that appear to be part of a regular travel corridor, resting area, denning area, and/or feeding area for target species.

Results In 2015 and 2016 a total of 12 different sites were monitored using wildlife cameras including sites along the Little Menomonee River, Menomonee River, Underwood Creek Parkway, and Root River Parkway. A variety of species were documented with the cameras including river otter, muskrat, gray fox, red fox, coyote, southern flying squirrel, fox squirrel, gray squirrel, chipmunk, white-footed mouse, skunk, opossum, raccoon, and white-tailed deer.

Conclusion Data collected through the wildlife camera monitoring program is actively incorporated into the Parks Department's Wildlife Monitoring Program database in order to guide current and future habitat management decisions. The wildlife camera monitoring program will continue in 2017!

Turkeys check out our set up



Wildlife Camera Monitoring



30°F - 1°C

01-15-2016 21:32:55

A rare sight in Milwaukee, a gray fox



26°F - 3°C

03-18-2016 22:54:01

Ear-tagged coyote caught on camera!

Other Research Project Highlights

Snake Monitoring

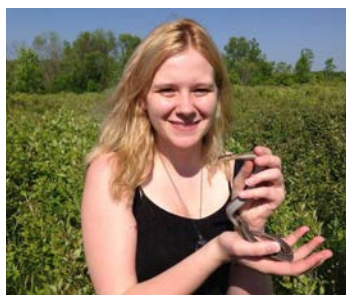
Milwaukee County is home to a variety of snake species including the Butler's gartersnake, common gartersnake, eastern plains gartersnake, northern brown snake, northern red-bellied snake, and the eastern milksnake! The Parks Department, Natural Areas staff and volunteers use plywood cover boards to capture, identify, measure, and mark snakes prior to releasing them. This data can be used to help determine population size, demographics, and habitat preferences. Snakes are an important part of ecosystems, acting as both a predator of small mammals, amphibians, and invertebrates while also serving as an important prey item for many other species like hawks. Further survey work still needs to be conducted in order to determine full spectrum of snake species that currently occur within Milwaukee County.



Snake monitoring in the field



Butler's Garter snake



Franklin ECO Club member



White-footed mouse adult



Mouse pups



Julia Robson, collecting small mammal data in the field

Small Mammals

While they often go unnoticed, small mammals play a key role in our local ecosystems by supporting complex predator-prey systems. Small mammals such as voles, mice, chipmunks, and shrews are often the primary prey item for middle-large sized predators such as weasels, mink, fox, coyotes, owls, and hawks. Additionally, some species of small mammals, such as the meadow jumping mouse, are closely associated with unique habitat types and can therefore be used as an indicator of habitat quality and restoration success.

This information will help to identify conservation needs

Breeding and Migratory Bird Monitoring

Similar to other species monitored by the Parks Department, birds are an important part of Milwaukee's urban ecology and culture. On a global scale birds face many threats from habitat loss and degradation, mortality from free-roaming cats, window collisions and climate change. In order to better conserve bird populations and manage the vital habitats that they rely on during migration and breeding, the Parks Department's Natural Areas Staff and volunteers work diligently to monitor the number and distribution of bird species utilizing the Park System's natural areas during various stages in their life cycle. Beginning in 2016 the Parks Department's Natural Areas Staff helped contribute to the Wisconsin Breeding Bird Atlas II. The WBBA II is an ongoing, statewide initiative that, with the help of thousands of volunteers, conducts a comprehensive field survey that documents the



Eastern wood pewee

distribution and abundance of birds breeding in an area. The information collected by the WBBA will allow researchers and wildlife managers to see changes in bird populations since the last survey and to measure potential future changes. This information will help to identify the conservation needs of breeding birds and how researchers, wildlife managers, and land managers can try to meet those needs. As of December 1st 2016, the Parks Department's Natural Areas Staff submitted 1054 checklists to eBird (Cornell Lab of Ornithology), having observed 201 species (101 migratory species and 100 confirmed breeding species)! You can follow our bird monitoring endeavours on our eBird profile here:

ebird.org/ebird/profile/NDA1MjY2/US-WI



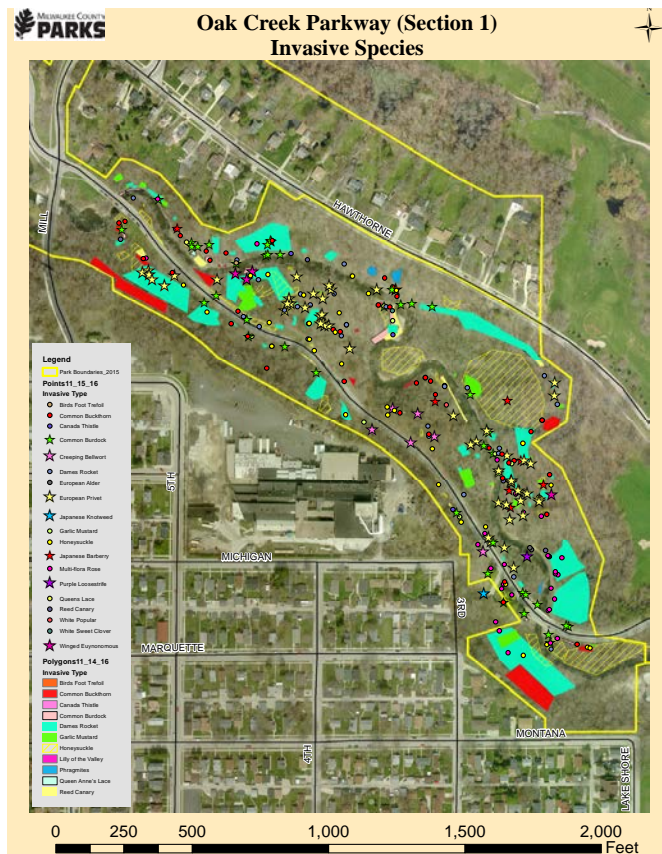
Franklin ECO Club looking for birds!

University Partnership Highlights

University of Wisconsin-Milwaukee

Conservation and Environmental Science Program

Each year the Parks Department's Natural Areas Program partners with the UW-Milwaukee Conservation and Environmental Science Program (UWM CES Program) and their Principles of Natural Resource Management course (CES 471) to engage students in the restoration and management planning process. The objective of this partnership is to provide students with worthwhile experience working in the field with other students and professionals, while also developing a project that will benefit the Parks Department's natural areas management efforts. Students work with Natural Areas staff to develop draft habitat restoration plans, research proposals, and/or hiking trail proposals. In 2016, this collaboration led to the development of a new partnership with the Waukesha County Land Conservancy (WCLC). A student group is working with the Parks Department's Natural Areas Program, UWM, and WCLC to develop a proposal for amphibian repatriation in Milwaukee County.



Wisconsin Lutheran College & Mount Mary University

Invasive Species Mapping

In collaboration with the Alliance for the Great Lakes, Wisconsin Lutheran College, and Mount Mary University the Parks Department's Natural Areas Program trained students to conduct vegetative sampling and mapping along the Oak Creek Parkway. Students learned how to identify invasive species populations and map them utilizing a tablet and Arc GIS Collector application (photo left). The data collected through this program will be used to monitor the success of invasive species management efforts, as well as track changes in the infestation levels over time!

iNaturalist

Milwaukee County Coyote Watch

The Milwaukee County Coyote Watch is a citizen-based, online reporting page that allows members of the public to submit their observations of coyotes in Milwaukee County to an easy-to-use public platform. The platform is hosted on “iNaturalist.org”. The main objective of the Milwaukee County Coyote Watch project is to learn more about coyote populations in Milwaukee County and monitor their behaviors. For their FIRST Lego League Challenge these students used the Milwaukee County Coyote Watch data to make a presentation and share it with their school!



FIRST Lego League Challenge: “Coyotes in Franklin”

Milwaukee County Parks Urban Biodiversity Inventory

One of our awesome web-based monitoring platforms for citizens to use to report their sightings of ANY plant or wildlife species in Milwaukee County! To add to the list here:

[inaturalist.org/projects/milwaukee-county-parks-urban-wildlife-inventory](https://www.inaturalist.org/projects/milwaukee-county-parks-urban-wildlife-inventory)

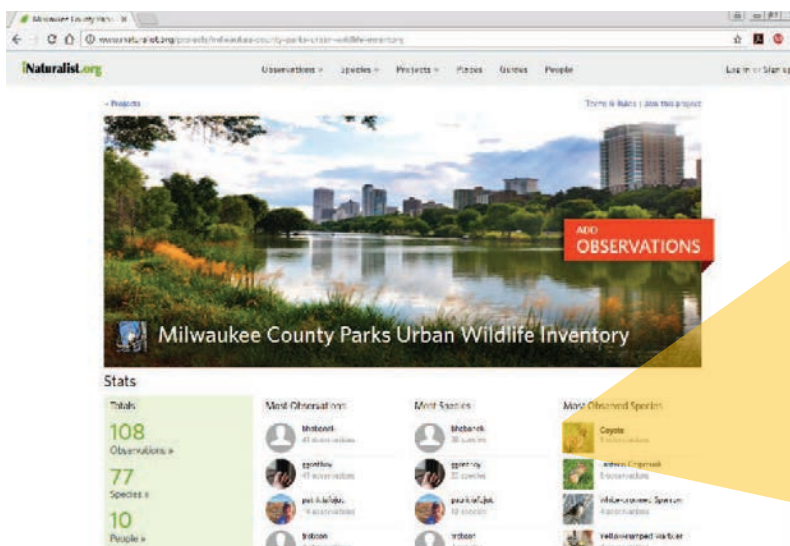


Photo Credit: Todd Leech

Volunteer Testimonials

“Being a part of this exciting project has really opened my eyes to some of the hidden gems of the natural world. In addition to this, my sons and middle school students have been inspired to explore and embrace nature at a newly-heightened level. What a wonderful opportunity for all of us! Please keep us in mind to help again next year!”

Chris Bosetti



Cooper and a blue-spotted salamander

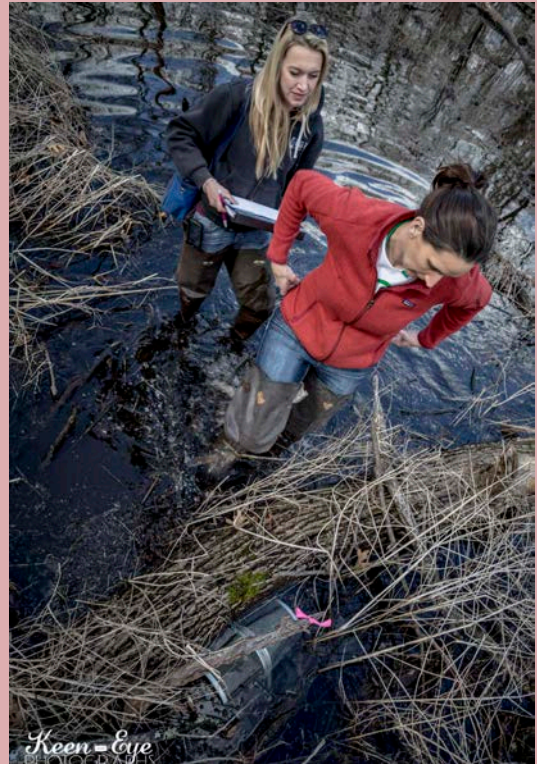


Photo Credit: Julian Kegel

Julie checking wetland traps

“Wetland monitoring was a fantastic experience! As a novice naturalist, I initially worried that I didn’t have enough of a science background to do citizen monitoring. I was so wrong! The county staff provided thorough training and materials to quickly learn the basics and gave me the resources to extend that knowledge. Our team consisted of myself and my three children. Not only did I gain an incredible amount of knowledge about our wetlands, but my children learned how to record data, identify more than a few invertebrates and crayfish, and how to respect our natural areas. We are so grateful for the opportunity to help monitor and protect these wetland areas!”

Becky Wilson

*“Anyone who enjoys the outdoors...
will like participating in the program.”*

“Ephemeral ponds are such a fragile ecosystem. There was something about seeing the diversity of life, all following ageless cycles, in this small scrap of land and to watch it unfold day after day, through a season. I was, at times, both awed and humbled as repeated visits allowed me to realize the interconnections, interdependence, and richness of this one small place. I was amazed by the wildflowers, multitude of birds, as well as the other animal species that relied upon the pond’s ecosystem.

One day I would see hawks soaring in a clear blue sky, on another, I saw cranes feeding in a nearby cornfield as snow swirled. The live traps yielded up surprise inhabitants I would not otherwise see. I learned a lot.

Through the Citizen Science project, we volunteers helped provide park naturalists a more complete picture of our parkland. The data collected contributed toward and could possibly help to support saving wetlands. The joy I felt slogging through a muddy pond reminded this retiree of my childhood adventures, and, I hope, in some small way, will allow others to discover the wonders of the natural world.”

Carol Flora



Maia checking traps in the field during wetland monitoring



Amphibians, like this green frog indicate the health of wetlands

“Anyone who enjoys the outdoors (no matter the weather) will like participating in the program. I especially had fun not just seeing what critters I trapped, but those that I came across sharing the ponds, woods and fields where I was working. Finding things like owl pellets, the opossum skull, the whip-poorwill nest, seeing the deer and the many different birds was also very interesting.”

Cindy Walter

Acknowledgments

The Parks Department would like to formally acknowledge the following groups and individuals for their enthusiasm, support, and contributions to our research programs. Their hard work and dedication has greatly contributed to the Natural Areas Program's success in wildlife and habitat management throughout Milwaukee County.

Adam Hernandez & Amanda Pautzka
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Angela Dassow & the Carthage College Ecology Lab
Dave O'Brien
Dr. Angela Jackson
Becky Wilson, Anna, Noah, & Ethan
Ben Habanek
Dr. Bob Anderson & Wisconsin Lutheran College
Brian McFadden
Carol Flora
Chloe Friday
Chris, Fletcher & Cooper Bosetti
Cindy Walter
Dan Mrotek
Julie Hahm & Greendale High School Environmental
Sciences class
Karen Johnson
Lauren Virovatz
Leah Warder & Christopher Knitter
Dr. Lynn Diener & Mount Mary University
Matt Stangel
Megan Wolf
Monica Stevens
Dr. Neal O'Rielly
Norm Gunder
Nicole Grams
Pam Uhrig
Patricia Heim, Rick Heim
Patrick Callan
Patrick Gain, Todd Cerpich, & the Franklin High
School ECO Club
Sally Callan
Samuel Fellows

Dan Mrotek
Dave O'Brien
Don Boehm
Erika Noble
Escuela Verde
FIRST Lego League – Philip, Monish, Michael,
David, Rashad, Devin, Cynde & John Dornuf
Friends of Lincoln Park
Dr. Gary Casper
Gary Schmitz
Hunger Task Force Farm
Jodi Lehner
Joshua Ruiz
Judith Ormond
Sara Long
Sarah Berquist, Dan Basterash, Evy Basterash
Sierra Talifero
The Lamp Family
Todd Leech
Student Conservation Association
Sue Hansen, Alyssa Hansen
Urban Ecology Center Young Scientist Club
UW-Milwaukee Conservation Club
UW-Milwaukee Principles of Natural Resource
Management classes (CES 471)
Waukesha County Land Conservancy
Wisconsin Citizen Based Monitoring Network
Wehr Nature Center
Wisconsin Department of Natural Resources



Evvy has been a dedicated volunteer for 2 years!

Consider Participation in Future Citizen Science “The valuable data that you help collect allows us to put the science behind the natural resource management decisions we are making in the Park System. Decisions that aim to protect and preserve the diversity of wildlife and plants that make our natural areas in Milwaukee County so important. While so much has already been accomplished in just two years, there is still much to be done, and we are so fortunate to have a community that is eager and willing to be a part of our team.”

-Assistant Natural Areas Coordinator Julia Robson



Want to get involved? Follow us on Facebook!
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Contact us directly
Julia.Robson@milwaukeecountywi.gov
or visit [CountyParks.com/CitizenScienceOpportunities](https://www.CountyParks.com/CitizenScienceOpportunities)

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Thank you!

